

CLAIMS

1. A hybrid of a drug with a layered silicate, the drug being selected from a group consisting of itraconazole, cyclosporine and carvedilol, where the drug is intercalated between the layers of the layered silicate and/or adsorbed onto the surface of the layered silicate.
 - 5 2. A hybrid as defined in Claim 1, wherein the drug is itraconazole.
 3. A hybrid as defined in Claim 1, wherein the layered silicate is selected from montmorillonite, beidellite, nontronite, hectorite, saponite, illite, celadonite and glauconite.
 - 10 4. A hybrid as defined in Claim 1, wherein the layered silicate is selected from montmorillonite, beidellite, saponite, hectorite and illite.
 5. A process for preparing the hybrid as defined in any one of Claims 1 to 4, comprising:
 - 15 (1) dispersing a layered silicate in an aqueous solution to form an aqueous solution containing the layered silicate;
 - (2) dissolving a drug in a organic solvent to form an organic solution containing the drug, the organic solvent having a solubility higher than that in said aqueous solution and forming an interface with said aqueous solution; and
 - 20 (3) mixing and hybridizing in the interface of said aqueous solution containing the layered silicate and said organic solution containing the drug to intercalate said drug into the interlayers of said layered silicate,
wherein the drug is selected from a group consisting of itraconazole, cyclosporine and carvedilol.
 - 25 6. A process as defined in Claim 5, wherein a solubility of the drug in the organic solvent is at least 10 times higher than that in the aqueous solution.
 7. A process as defined in Claim 5, wherein the interfacial reaction is processed under an acidic condition.
 - 30 8. A process as defined in Claim 5, wherein pH of the aqueous solution containing the layered silicate in step (1) is between about 0 and about 6.
 9. A process as defined in Claim 8, wherein pH of the aqueous solution containing the layered silicate in step (1) is between about 1 and about 4.
 - 35 10. A process as defined in Claim 5, wherein a content of the layered silicate in the aqueous solution in step (1) is between about 1 % and about 10 % by weight.
 11. A process as defined in Claim 5, wherein a content of the layered silicate in the aqueous solution in step (1) is between about 0.5 % and about 3 % by weight.

12. A process as defined in Claim 5, wherein a content of the drug in the organic solution in step (2) is between about 1 % and about 30 % by weight.

13. A process as defined in Claim 5, wherein an amount of the organic solvent is such that a concentration of the layered silicate in the aqueous solution is 30 % or 5 less, and an amount of the drug in the organic solvent is 900 % or less than that of the layered silicate.

14. A hybrid obtained by mixing Eudragit E100[®] dissolved in an organic solvent with the hybrid of itraconazole with the layered silicate as defined in any one 10 of Claims 1 to 5, the amount of said Eudragit E100[®] being at least 10 by weight based on the weight of itraconazole.

15. A hybrid obtained by mixing a aqueous solution of hydroxypropyl methyl cellulose (HPMC) with the hybrid as defined in Claim 14, the amount of said HPMC being is at least 0.5 by weight based on the weight of itraconazole.